

Whilst mortality due to this anthropogenic factor is of low concern for common and widespread species such as *L. fallax*, it would be of high concern for those threatened and vulnerable species with more restricted distributions that breed in ephemeral water bodies. It may require attention and policing by management authorities in National Parks and other reserve areas during the reproductive season.

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## Visitation by common native birds to eucalypts on Deakin University Burwood Campus, Victoria

The Burwood Campus of Deakin University is located approximately 15 km from Melbourne's Central Business District. The campus has a variety of plants including eucalypts and grevilleas. *Eucalyptus* species include *E. sideroxylon* (Red Ironbark), *Corymbia maculata* (Spotted Gum) and *E. muellerana* (Yellow Stringy Bark). Many bird species frequent the campus and visit the various plants and I was curious as to whether there would be a difference in the number and types of birds visiting these three eucalypts. I examined three trees of each species at hourly intervals on 5, 6 August 2014, from 8.00 am to 5.00 pm. I focused on four bird species, all native and common: Rainbow Lorikeet *Trichoglossus haematodus*, Noisy Miner *Manorina melanocephala*, Australian Magpie *Cracticus tibicen* and Eastern Rosella *Platycercus eximius*. Each bird belonged to a different foraging guild (Table 1) and I believed that tree visitation would be related to foraging motivation. Both *C. maculata* and *E. sideroxylon* were in flower at the time of my observations.

Over the two days, 54 observations were made for each tree species. The two ground foraging birds, Australian Magpie and Eastern Rosella, were seen only twice in the trees, while 94 Rainbow Lorikeets were seen, most commonly in *C. maculata* (Table 1) and less frequently (but still commonly) in *E. sideroxylon*. Rainbow Lorikeets were not seen to visit *E. muellerana*. The Noisy Miners, although still common, were less frequent visitors than the Rainbow Lorikeet and were observed in each of the three eucalypt species (Table 1).

The Rainbow Lorikeet is a nectarivore and the Noisy Miner feeds on both nectar and insects, so it was not surprising that these species frequented the flowering trees. *Corymbia maculata* flowers from May to September and *E. sideroxylon* from January to September (Williams and Woinarski 1997). *Eucalyptus muellerana* flowers from October to February. Lill (2009) found that eucalypt nectar (and/or pollen) formed 86–97% of the diet of urban Rainbow Lorikeets and considered their year-round presence due

Table 1. Bird species observed in three eucalypt species on Deakin Burwood campus

Common name	Scientific name	Guild	Number of birds observed/tree species		
			<i>Eucalyptus muelleriana</i>	<i>Eucalyptus sideroxylon</i>	<i>Corymbia maculata</i>
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	Nectarivore	0	30	64
Noisy Miner	<i>Manorina melanocephala</i>	Nectarivore/ insectivore	6	13	14
Australian Magpie	<i>Cracticus tibicen</i>	Ground insectivore	1	1	0
Eastern Rosella	<i>Platycercus eximius</i>	Ground granivore	0	2	0

to the widespread planting of eucalypts in urban areas. The variety of eucalypts, both native to and not native to Melbourne suburbia and which flower in different seasons, means there is a year-round food source for these birds. Deakin has several more species of eucalypt than the three I examined, including *E. globulus* and *E. leucoxylon*, which are important food sources for Rainbow Lorikeets (Lill 2009).

The Noisy Miners also were significant exploiters of the flowering trees but at 43% and 22% of the lorikeet's usage of *E. sideroxylon* and *C. maculata* respectively. Their visits to *E. muelleriana* were presumed to be motivated by the presence of insect delicacies. Noisy Miners are known to spend 25% of their time foraging on grevilleas when these plants are present (<http://www.birdsinbackyards.net/What-characteristics-urban-gardens-influence-distribution-and-foraging-ecology-Noisy-Miners>: accessed 18 May 2015). Deakin has a variety of Grevilleas in considerable abundance so this may explain why the Noisy Miners were not significant competitors with the Lorikeets.

That each of the two ground foragers visited the eucalypts twice over the two days of my observations shows the importance of these trees as a resource other than for food for birds. Deakin University, Burwood Campus is not an urban park, but the variety of trees provides important resources (e.g. food, shelter, perching

or roosting sites) for these and many other bird species. With urban development continuing to expand into native habitats, it is important to remember to plant large trees to provide for our bird, and other, species. Large trees often are not seen as desirable in the home garden (Kirkpatrick *et al.* 2007), particularly in small to medium sized land blocks. My simple two day study demonstrates that organisations such as universities, which are built on larger land blocks than the average home, are important in providing large trees to suburban regions as resources for wildlife.

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